AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A pressure transducer for a hydrogen reciprocating compressor in a sour gas environment comprising a sensor head including a diaphragm mounted on a free end of said sensor head;

wherein said diaphragm is constructed of a nickel-based alloy with a noble metal plating on an exposed side thereof.

2. (Original) The pressure transducer of claim 1 wherein said nickel-based alloy is a C-276 alloy.

3. (Original) The pressure transducer of claim 1 wherein said sensor head includes a threaded end portion and an integral hex nut that are comprised of said nickel-based alloy.

4. (Original) The pressure transducer of claim 3 wherein said nickel-based alloy is a C-276 alloy.

5. (Original) The pressure transducer of claim 1 wherein said noble metal plating comprises 24K gold plating.

6. (Original) The pressure transducer of claim 1 wherein said gold plating is applied to a thickness of about 5-8 microns.

7. (Original) The pressure transducer of claim 1 wherein said diaphragm has a thickness of about 42 microns.

8. (Original) The pressure transducer of claim 7 wherein said gold plating is applied to a thickness of about 5-8 microns.

9. (Currently Amended) ~~The pressure transducer of claim 1~~ A pressure transducer for a hydrogen reciprocating compressor in a sour gas environment comprising a sensor head including a diaphragm mounted on a free end of said sensor head;

wherein said diaphragm is constructed of a nickel-based alloy with a noble metal plating on an exposed side thereof;

and further comprising a housing connected to said sensor head by a transducer cable.

10. (Original) The pressure transducer of claim 9 wherein said transducer cable is enclosed in armor.

11. (Original) A pressure transducer for a hydrogen reciprocating compressor in a sour gas environment comprising a sensor head including a diaphragm mounted on a free end of said sensor head;

wherein said diaphragm is constructed of a nickel-based C-276 alloy with gold plating on an exposed side thereof; and

wherein said sensor head includes a threaded end portion and an integral hex nut that are also constructed of said nickel-based C-276 alloy.

12. (Original) A method of monitoring line pressure in a reciprocating hydrogen compressor in a sour gas environment comprising:

a) providing a pressure transducer having a sensor head and a diaphragm located flush with a free end of said sensor head composed of a nickel-based alloy;

b) applying gold plating to one side of said diaphragm; and

c) mounting said pressure transducer in a reciprocating compressor with said one side exposed to the sour gas.

13. (Original) The method of claim 12 wherein said nickel-based alloy comprises a C-276 alloy.

14. (Original) The method of claim 12 wherein said gold plating comprises 24K gold plating.

15. (Original) The method of claim 12 wherein said gold plating is applied to a thickness of about 5-8 microns.

16. (Original) The method of claim 12 wherein said diaphragm has a thickness of about 42 microns and said gold plating is applied to a thickness of about 5-8 microns.

17. (Original) The method of claim 12 wherein said sensor head includes a threaded end portion and an integral hex nut comprised of said C-276 alloy.